

FACT SHEET FOR NPDES PERMIT WA-000092-2
FACILITY NAME Port Townsend Paper Corporation

SUMMARY

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see Appendix A--Public Involvement of the fact sheet for more detail on the Public Notice procedures).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Comments and the resultant changes to the permit will be summarized in Appendix E--Response to Comments.

<u>GENERAL INFORMATION</u>	
Applicant	Port Townsend Paper Corporation
Facility Name and Address	Port Townsend Paper Corporation 100 Paper Mill Road, Port Townsend, WA 98368
Type of Facility:	Unbleached Kraft Pulp and Paper Mill
SIC Code	Pulp Mill SIC # 2611 Paper Mill SIC # 2621 Uncoated Paper & Multiwall SIC # 2674
Discharge Location	Waterbody name: Port Townsend Bay Outfalls 005 002 003 Latitude: 48° 05' 20" N 48° 05' 35" N 48° 05' 34" N Longitude: 122° 47' 36" W. 122° 47' 38" W. 122° 47' 40" W.
	The sanitary wastewater discharged after receiving secondary treatment and disinfection into the influent process wastewater treatment stream and discharged via Outfall 005 with the treated process wastewater.
Water Body ID Number	WA-17-0030 Segment 09-17-01

DESCRIPTION OF THE FACILITY

HISTORY

The Port Townsend Pulp and Paper mill and paper machine number 1 were built in 1927 by National Paper. A second paper machine was added in 1929. In 1940 the mill was purchased by Crown Zellerbach and sold to Haindl in 1983. The mill was acquired by PTPC Acquisition Co. Inc. in late 1997. The mill employs approximately 435 people.

INDUSTRIAL PROCESS

A new recycling plant was added to recycle old corrugated cardboard (OCC) into pulp in the fall of 1996. The mill produces an average of 650 tons of pulp per day of which 150 tons/day is OCC pulp and 500 tons/day is kraft unbleached paper. The mill plans on increasing the production level of both lines. The kraft mill line is expected to produce 600 tons of pulp per day. The old corrugated cardboard (OCC) line, a recycling process, is expected to produce 400 tons pulp per day during the life of the permit. The production will be phased-in with four tiers.

DISCHARGE OUTFALL

The treated process wastewater from the mill receives primary treatment and secondary treatment before being discharged via outfall 005 to Port Townsend Bay. The outfall extends about 1200 feet from shore into Glen Cove, the westerly most part of Port Townsend Bay into about 40 feet of water. The process wastewater flow is continuous and averages from 11 to 16

MGD. The major pollutants of concern are biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH. The sanitary waste is discharged into outfall 005 after receiving secondary treatment via an activated sludge package plant. The sanitary waste is disinfected with sodium hypochlorite prior to being introduced into outfall 005. The flow from the sanitary sewer averages about 9000 gallons/day. The sanitary wastewater flow is a very small portion of the total flow from outfall 005. Outfall 002 discharges about 3 MGD turbine condenser cooling water and outfall 003 discharges unused salt water from the salt water chest overflow into the Port Townsend Bay. The flow for outfall 003 is not measured. Temperature is the only pollutant of concern from outfall 002 and 003. Neither the turbine cooling water nor the saltwater overflow contains pulp. All stormwater flow is routed to the secondary treatment system through the primary treatment system. The mill had the following discharge from outfall 005 during the last two years:

PROCESS WASTEWATER

Parameter	Monthly average	Range
Flow (MGD)	13.7 MGD	11 - 19.7 MGD
pH	---	6.2 - 10.8 SU
BOD ₅	1311 lbs./day	800 - 2,500 lbs./day
TSS	2022 lbs./day	900 - 4,400 lbs./day
Temperature	67 °F	48 - 85 °F

SANITARY WASTEWATER

Parameter	Two years averaged	Range
Flow (MGD)	0.009 MGD	0.0046 - 0.0173 MGD
pH	---	5.0 - 10.0 SU
BOD ₅	9 MG/L	2 - 80 MG/L
TSS	9 MG/L	4 - 54 MG/L
FECAL COLIFORM	-	1 - 78 COUNT/100 ML

PERMIT STATUS

The previous permit for this facility was issued on June 29, 1990 and modified on October 20, 1993. The previous permit placed effluent limitations on BOD₅, TSS, bioassay, and pH for

outfall 005 and BOD₅, TSS, total chlorine residual, and fecal coliform on the sanitary wastewater before introduction into process wastewater stream and discharged via outfall 005

An application for permit renewal was submitted to the Department on January 3, 1995 and accepted by the Department on August 20, 1996.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on February 24, 1999. The last Class II compliance inspection was conducted on November 13, 1998. The permittee was found to be in compliance with their permit limits.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) submitted to the Department and inspections conducted by the Department. The company had two BOD₅ exceedances on December 22 and 23, 1997 and one TSS exceedance on December 21, 1997. The permittee had been in compliance with their permit for over a year when these exceedances occurred. The permittee was penalized \$6,000 for these three violations.

WASTEWATER CHARACTERIZATION

The proposed wastewater discharge is characterized for the following regulated parameters:

Table 1: Wastewater Characterization

Parameter	Concentration
BOD ₅	21.2 mg/L
TSS	108 mg/L
Fecal Coliform	3 colonies/ 100 ml.
Surfactants	0.07 mg/L
Antimony	0.0009 mg/L
Chromium	0.007 mg/L
Copper, Total	0.005 mg/L
Nickel, Total	0.011 mg/L
Zinc, Total	0.01 mg/L
Oleic acid/Linoleic acid	41 mg/L
Phenols, Total	0.15 mg/L
O & G	<1 mg/L

SEPA COMPLIANCE

There are no SEPA requirements for this permit.

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The limits in this permit are based in part on information received in the application. The effluent constituents in the application were evaluated on a technology- and water quality-basis. The limits necessary to meet the rules and regulations of the State of Washington were determined and included in this permit. Ecology does not develop effluent limits for all pollutants that may be reported on the application as present in the effluent. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and/or do not have a reasonable potential to cause a water quality violation. If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee is required to notify the Department of Ecology.

DESIGN CRITERIA

The design criteria for the treatment facility are sufficient to provide secondary treatment to all wastewater. The wastewater-aerated lagoon may be dredged under an order if it is determined that the basin needs dredging.

EVALUATION OF PERFORMANCE BASED PERMIT EFFLUENT LIMITS

Ecology has evaluated the performance of the wastewater treatment to meet the permit limit. The permittee's reported values on the monthly DMR were lower than the permit limits for the monthly average for BOD and TSS. However, the permittee exceeded the daily maximum limit for both BOD and TSS during the same time period. The permittee has requested an increase in production of the Kraft product line and installed a new OCC line. Because, the daily maximum BOD and TSS limit have been exceeded and the increased production level, the use of performance base permit limits is not appropriate for this proposed permit.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Technology-based limitations are set by regulations or developed on a case by case basis. The federal effluent guidelines for practicable control technically available (BPT) is defined in Part 430 Subpart A for unbleached Kraft paper and for paperboard from waste paper in Part 430 Subpart E published in the federal register on November 18, 1982 and March 30, 1983. The federal effluent guidelines for best conventional pollutants control technology (BCT) for these categories were defined on December 17, 1986 to be the same as BPT previously defined in March 1983. BCT and BPT were defined more than ten years ago. With BCT and BPT being

defined longer than ten years, it is Ecology policy to determine if they are still valid and if they can still be considered equivalent to all known and reasonable treatment (AKART) for these categories of paper making.

In the most recent Class II enhanced inspection conducted by Ecology (Golding, 1994) in November/December 1993, the removal efficiencies for BOD and TSS across the primary and secondary treatment system was 95 percent for both of these conventional pollutants. The class II enhanced inspection noted that the company's system was nitrifying during the time of the inspection. The percent removal of BOD determined by Ecology is greater than that determined by EPA in their analyses of this type of treatment system while promulgating the 1982 effluent guidelines (EPA 440/1-82/025, page 335). The removal of TSS in the Port Townsend's treatment system was greater than the TSS removal with chemical clarified activated sludge effluent for suspended solids but was 2 percent below that determined for BOD removal (p. 348, EPA 440/1-82/025). EPA further determined that the aerated lagoon reduced toxicity of the effluent and that treatment efficiencies were dependent on outside air temperatures for aerated lagoons.

In a letter dated December 2, 1998 to Ecology, the company indicated that the secondary treatment system removed about 93 percent of the influent BOD and about 80 percent of the TSS for 1997 and 1998. These removals do not take into consideration the amount of BOD and TSS removed in the primary treatment system.

The OCC system became operational in 1997. Before this date, the company produced pulp and paper by the Kraft process only. The company submitted its application for the current permit on October 24, 1988. The OCC mill was not in operation. The company has been discharging under the permit issued on June 29, 1990. A review of the permit applications indicated that the discharged wastewater had very similar characteristics compared to the current and the previous applications. There were no new chemicals in the present system with concentrations that caused concerns in the wastewater from the Kraft pulp and paper mill with the OCC on line, than was originally in the Kraft process wastewater only. The OCC paper was originally made from Kraft unbleached paper. Therefore, the repulping of the cardboard made from used unbleached Kraft paper is not expected to introduce any new toxic substances into the wastewater treatment system.

On April 15, 1998, the Environmental Protection Agency promulgated effluent guidelines for the Kraft bleached paper grade. This category included Market Bleached Kraft, 40 CFR part 430 Subpart G, BPT Bleached Kraft, 40 CFR part 430 Subpart H, Fine Bleached Kraft, 40 CFR part 430 Subpart I, and Soda, 40 CFR part 430 Subpart P. The 1998 allowance for BOD and TSS per ton of pulp produced for bleached Kraft paper with the finished product defined for each of the above category was set at the same value as the allowances in the effluent guidelines published in 1982. The 1998 effluent guidelines took both emissions to air and water into consideration and included chlorinated organic compounds.

The new effluent guidelines for Kraft unbleached paper will contain 40 CFR part 430 Subpart A -unbleached Kraft for liner board, bag and other products and unbleached Kraft, 40 CFR part 430 Subpart D, and Semi-Chemical, Subpart V. The most stringent effluent limitation for BOD and TSS is 40 CFR part 430 Subpart A (1982) for the unbleached Kraft categories. Its unlikely that

the new effluent guidelines will have less allowance for BOD and TSS per ton of pulp produced than 40 CFR part 430 Subpart A (1982) if EPA follows what they did for bleached Kraft paper grade.

Any further treatment beyond secondary treatment would only add a few percentage points to the removal efficiencies for BOD and TSS since the best wastewater treatment system removes about 95 percent of the influent BOD and TSS. Therefore, secondary treatment with an aerated lagoon is determined to be equivalent to all known, available, and reasonable methods of treatment (AKART) for the conventional pollutants for this wastewater stream.

The aerated lagoon system is usually stable with respect to treatment efficiency. However, there can be variations. Likewise, the actual test procedure has a great deal of variability in its results when compared across different laboratories as well as different technicians performing the tests. In developing the effluent guidelines, EPA took this variability into consideration for the daily maximum allowance and the 30 days average allowance for BOD and TSS.

With the secondary treatment removal rate discussed above, with the variability of the test results discussed above, with the variability in the treatment system removal efficiencies for conventional pollutants, and with 40 CFR part 430 Subpart A (1982) having the smallest allowance for conventional pollutants in the group that is expected to form the new effluent guidelines, 40 CFR part 430 Subpart A (1982) is defined as AKART for conventional pollutants produced by the unbleached Kraft process portion of this mill. This determination is made by best professional judgement. It is also determined that 40 CFR part 430 Subpart E (1982) is AKART for the portion of the pulp and paper being produced by the OCC product line by best professional judgement.

The 1990 NPDES permit for this source defined the base line production to be 450 tpd Kraft unbleached paper. Therefore, the BPT limits for conventional pollutants will be calculated for production of 450 tpd for unbleached Kraft using 40 CFR 430.12 of Subpart A. See below for the latest publication. The allowance for conventional pollutants will be calculated for the production level increase of Kraft unbleached Kraft paper above the base line (450 tpd) using 40 CFR 430.15, NSPS Subpart A. Facilities where bag papers and other mixed products are produced. See below for the latest publication. Since the OCC line was built after 1982, the entire allowances for conventional pollutants will be calculated with the NSPS section of 40 CFR 430 Subpart E (corrugated medium furnish subdivision). See below for the latest publication date. The new source performance standard (NSPS) effluent guidelines are for new sources and are more stringent than the guidelines for existing sources.

The Environmental Protection Agency republished 40 CFR 430.12 of Subpart A (1982) in the Federal Register on April 15, 1998 for pulp produced by the unbleached Kraft method as 40 CFR 430.30 Subpart C without any changes. The NSPS part of 40 CFR 430.15, NSPS, Subpart A (1982) became 40 CFR 430.35, NSPS, Subpart C in the April 15, 1998 regulations. The NSPS part of 40 CFR Subpart E became 40 CFR 430.105, NSPS. There were no changes in any of the allowances.

Since the mill will be increasing production from the OCC process line during the permit term, the permit limits are tiered for four levels of production. If the production decreased when the limits are defined for a higher tier, the limits will automatically be reduced to the next lower tier.

Effluent guidelines allowances for the type of production are given below:

	BOD	BOD	TSS	TSS
	30 day ave	daily max	30 day ave	daily max
	lbs/1000 lbs	lbs/1000 lbs	lbs/1000 lbs	lbs/1000 lbs
Existing Kraft	2.8	5.6	6	12
NSPS Kraft	2.7	5	4.8	9.1
NSPS OCC	2.1	3.9	2.3	4.4

The production used for each tier is given below:

Production	Incremental Kraft	Incremental OCC	Total production Kraft	Total production OCC	Total combined production
	Tons/day	tons/day	Tons/day	tons/day	tons/day
Base (Existing)	450				
Tier I (NSPS)	150	150	600	150	750
Tier II (NSPS)	0	100	600	250	850
Tier III (NSPS)	0	100	600	350	950
Tier IV (NSPS)	0	50	600	400	1000

The limits for each tier is calculated using the production indicated for that tier. The effluent limits are summarized below:

	Production (ton/day)	BOD Monthly Average	BOD Daily Maximum	TSS Monthly Average	TSS Daily Maximum
T-1	≤ 750	3960	7710	7530	14850
T-2	≤ 850	4380	8490	7990	15730
T-3	≤ 950	4800	9270	8450	16610
T-4	≤ 1,000	5010	9660	8680	17050

For the sanitary wastewater treatment system, the previous permit set BOD and TSS limit as 30 mg/L and 30 mg/L with a fecal coliform limit of 200 count/100 mL and a chlorine residual limit of 0.1 to 5.0 mg/L. The 30-30 limits for this system are considered AKART. These limits will be carried over into the renewal of the permit. The 85 percent removal requirement of WAC 173-221-040(1) was inadvertently left out of the previous permit. The removal efficiency has been added to the permit being reissued.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be

conditioned such that the discharge will meet established Surface Water Quality Standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in the receiving water while remaining protective of aquatic life. Numerical criteria set forth in the Water Quality Standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington.

ANTIDegradation

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

The Department has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in Chapter 173-201A WAC; therefore, the Department will use the designated classification criteria for this water body in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the waterbody's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic water body uses.

MIXING ZONES

The Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

DESCRIPTION OF THE RECEIVING WATER

The facility discharges to Port Townsend Bay. Port Townsend Bay is designated as a Class A receiving water in the vicinity of the outfall. Other nearby point sources includes the city of Port Townsend and the Naval Facility on Indian Island. Significant nearby non-point sources includes farms and boat mooring. Characteristic uses include the following: industrial water supply; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall markedly and uniformly exceed the requirements for all or substantially all uses.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA 1992). Criteria for this discharge are summarized below:

Fecal Coliforms	Not exceed both a geometric mean of 14 organisms/100 mL or have more than 10% of all sample used in calculating the geometric mean greater than 43 colonies/100 mL
Dissolved Oxygen	Shall exceed 6 mg/L When natural conditions such as upwelling occur, causing the dissolved oxygen to be depressed near or below 6 mg/L, natural dissolved oxygen levels may be degraded by up to 0.2 mg/L by human activities
Temperature	When natural condition exceed 16.0 °C no temperature increases will be allowed which will raise the receiving water temperature

	by greater than 0.3 °C.
pH	7.0 to 8.5 standard units with a human-caused increase within a the above range of less than 0.5 units.
Turbidity	less than 5 NTU above background
Toxics	No toxics in toxic amounts (see Appendix C for numeric criteria for toxics of concern for this discharge)

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

Pollutant concentrations in the proposed discharge exceed water quality criteria with technology-based controls that the Department has determined to be AKART. A mixing zone is authorized in accordance with the geometric configuration, flow restriction, and other restrictions for mixing zones in Chapter 173-201A WAC and is defined as follows:

The acute mixing zone boundary extends 24.5 feet measured from any diffuser port. The chronic dilution zone boundary extends 245 feet from any diffuser port. The dilution factors of effluent to receiving water that occur within these zones have been determined at the critical condition by the use of U.S EPA's Plume dilution model. The dilution factors have been determined to be:

	Acute	Chronic
Aquatic Life	64	77
Human Health, Carcinogen		77
Human Health, Non-carcinogen		77

Pollutants in an effluent may affect the aquatic environment near the point of discharge (near field) or at a considerable distance from the point of discharge (far field). Toxic pollutants, for example, are near-field pollutants--their adverse effects diminish rapidly with mixing in the receiving water. Conversely, a pollutant such as BOD is a far-field pollutant whose adverse effect occurs away from the discharge even after dilution has occurred. Thus, the method of calculating surface water quality-based effluent limits varies with the point at which the pollutant has its maximum effect.

The derivation of surface water quality-based limits also takes into account the variability of the pollutant concentrations in both the effluent and the receiving water.

BOD₅--Under critical conditions there is no predicted violation of the Water Quality Standards for Surface Waters. Therefore, the technology-based effluent limitation for BOD₅ was placed in the permit.

Temperature--The impact of the discharge on the temperature of the receiving water was modeled by simple mixing analysis at the critical condition. The highest temperature of the receiving water during the June 1978 monitoring near the Port Townsend Paper Mill's outfall was 13.8 °C and the highest effluent temperature for the last two years was 29.44 °C. The predicted resultant temperature at the boundary of the chronic mixing zone is 14 °C and the incremental rise is 0.2 °C. At 13.8 °C, the allowed rise in temperature of a Class A receiving water would be 1.02 °C. Allowable incremental temperature changes are described by formula

in the Water Quality Standards regulation (Chapter 173-201A WAC). Under worse case conditions there is no predicted violation of the Water Quality Standards for Surface Waters. Therefore, no effluent limitation for temperature was placed in the proposed permit. However, continuous monitoring, recording, and reporting of the temperature are placed in the permit. This condition was in the previous permit.

pH--Because of the high buffering capacity of marine water, compliance with the technology-based limits of 6.0 to 9.0 will assure compliance with the Water Quality Standards for Surface Waters.

Turbidity--The impact of turbidity was evaluated based on the range of turbidity in the effluent and turbidity of the receiving water. Due to the large degree of dilution, it was determined that the turbidity criteria would not be violated outside the designated mixing zone.

Toxic Pollutants--Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. This process occurs concurrently with the derivation of technology-based effluent limits. Facilities with technology-based effluent limits defined in regulation are not exempted from meeting the Water Quality Standards for Surface Waters or from having surface water quality-based effluent limits.

As reported in the permittee's application submitted for permit renewal, the following chemicals with a water quality criteria were detected in the discharge above the detection limit: chromium, copper, nickel, and zinc. A reasonable potential analysis (See Appendix C) was conducted on these parameters to determine whether or not effluent limitations would be required in this permit.

The determination of the reasonable potential for copper, nickel, zinc and chromium to exceed the water quality criteria was evaluated with procedures given in EPA, 1991 at the critical condition. The 10 % current speed was used as the critical condition for acute dilution ratio and the median was used for the chronic dilution ratio. The parameters used in the critical condition modeling are as follows: acute dilution factor of 64:1 and a chronic dilution factor 77:1, receiving water temperature 13.8 °C. Battelle Marine Sciences Laboratory Study, 1984 found copper at 1.41 µg/L and zinc at 1.36 µg/L in Port Townsend's Marina and chromium at 0.299 µg/L and nickel at 0.292 µg/L at Pillar Point. The Battelle value will be considered background. Water quality criteria for metals in Chapter 173-201A WAC are based on the dissolved fraction of the metal. These analyses were taken close to the Port Townsend discharge and are considered to be fairly conservative of the diffuser's environment.

A determination of the discharge's potential to cause an exceedance of the water quality standards was conducted as required by 40 CFR 122.44(d). With the ambient background data that was available for copper, zinc, chromium, and nickel and the effluent data submitted by the permittee in the application. The reasonable potential determination was evaluated with procedures given in the Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-005) and the Department's Permit Writer's Manual (Ecology Publication 92-109, July, 1994). The determination indicated the discharge has no reasonable potential to cause a violation of water quality standards, thus an effluent limit is not warranted. The reasonable potential analysis is provided in Appendix C to the document. The discharge will be re-

evaluated for impacts to water quality when the next permit is issued. This determination assumes that the Permittee meets the other effluent limits of this permit.

WHOLE EFFLUENT TOXICITY

The Water Quality Standards for Surface Waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

Acute toxicity tests measure mortality as the significant response to the toxicity of the effluent. Dischargers who monitor their wastewater with acute toxicity tests are providing an indication of the potential lethal effect of the effluent to organisms in the receiving environment.

Chronic toxicity tests measure various sublethal toxic responses such as retarded growth or reduced reproduction. Chronic toxicity tests often involve either a complete life cycle test of an organism with an extremely short life cycle or a partial life cycle test on a critical stage of one of a test organism's life cycles. Organism survival is also measured in some chronic toxicity tests.

Accredited WET testing laboratories have the proper WET testing protocols, data requirements, and reporting format. Accredited laboratories are knowledgeable about WET testing and capable of calculating an NOEC, LC₅₀, EC₅₀, IC₂₅, etc. All accredited labs have been provided the most recent version of the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* which is referenced in the permit. Any Permittee interested in receiving a copy of this publication may call the Ecology Publications Distribution Center 360-407-7472 for a copy. Ecology recommends that Permittees send a copy of the acute or chronic toxicity section(s) of their permits to their laboratory of choice.

An effluent characterization for acute and chronic toxicity was conducted during the previous permit term. In accordance with WAC 173-205-060, the Permittee must repeat this effluent characterization for the following reason. The Permittee has made changes to processes, the addition of an 400 ton per day old corrugated cardboard (OCC) process which was opened in 1996 could result in an increase in effluent toxicity. In accordance with WAC 173-205-060(1), the proposed permit requires another effluent characterization for toxicity.

HUMAN HEALTH

Washington's water quality standards now include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were promulgated by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The Department has determined that the applicant's discharge does not contain chemicals of concern based on existing data or knowledge. The reasonable potential analyses are provided in Appendix C to the document. The discharge will be re-evaluated for impacts to human health when the next permit is issued.

SEDIMENT QUALITY

The Department has promulgated aquatic sediment standards (Chapter 173-204 WAC) to protect aquatic biota and human health. These standards state that the Department may require the Permittee to evaluate the potential for the discharge to cause a violation of applicable standards (WAC 173-204-400). The permittee performed sediment monitoring in the vicinity of their outfall in the last permit. The Department has determined through the review of this monitoring that the discharge has no reasonable potential to violate the Sediment Management Standards. Therefore, no sediment monitoring is required in the permit.

GROUND WATER QUALITY

The Department has promulgated Ground Water Quality Standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100). The unlined aeration basin is about 1000 feet from the shoreline of Glen Cove. The diffuser is located about 1200 feet from shore. Since, the aeration basins are up gradient from the salt-water body; the possible discharge into the ground water would travel in the direction of this water body. Since the permittee discharges the treated wastewater into this water body either by direct discharge, outfall 005 or through the soil under the aeration basin to the water body, the outcome is the same. The Permittee has a very slight potential to discharge to ground water that would not be discharged into Glen Cove. The ground water is contiguous with the receiving water. The mass discharged for BOD and TSS based on the influent flow to the treatment system. Therefore, the monitoring data account for all of the mass discharged. Therefore, there will no limitations or monitoring requirements placed in the permit during this permitting phase.

SHELLFISH PROTECTION

There are geoduck clam and public shellfish beds located about one half mile from the outfalls. At this time the Department of Health has not been requested to certify these beds for harvest. If and when certification is requested, Ecology will require the permittee to perform a fecal coliform study on their outfalls in coordination with the Department of Health.

COMPARISON OF EFFLUENT LIMITS WITH THE EXISTING PERMIT ISSUED JUNE 29, 1990 AND MODIFIED ON OCTOBER 20, 1993

Existing Limits

Production Unbleached Kraft (Tons/day)	BOD (LBS/d)		TSS (LBS/d)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
> 600	3100	6000	6400	6500
>600 but < 650	3300	6800	6800	13500
>650	3600	7300	7300	14400

Proposed limits

Production Unbleached Kraft and OCC paper (Tons/day)	BOD (LBS/d)		TSS (LBS/d)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
≤ 750	3,960	7,710	7,530	14,850
≤ 850	4,380	8,490	7,990	15,730
≤ 950	4,800	9,270	8,450	16,610
≤ 1,000	5,010	9,660	8,680	17,050

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved. The monitoring schedule is detailed in the proposed permit under Condition S.2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. The laboratory at this facility is accredited for BOD, TSS, pH, and chlorine residual. The company hires accredited laboratories to perform bioassays and fecal coliform tests.

SANITARY WASTEWATER TREATMENT PLANT OPERATOR CERTIFICATION

The sanitary treatment system has influent pumping, diffused air, and disinfection. With the flow and population equivalence, the system is classified a Class I plant in accordance with

Chapter 70.95B RCW. Therefore, the sanitary treatment system must have a class I certified operator.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

Condition S3. is based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080. The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste. This proposed permit require, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state. The plan must be submitted to the local permitting agency for approval, if necessary, and to the Department.

EFFLUENT MIXING STUDY

The Department has estimated the amount of mixing of the discharge within the authorized mixing zone to determine the potential for violations of the Water Quality Standards for Surface Waters (Chapter 173-201A WAC). The Permittee determined the mixing characteristics of the discharge in the previous permit. No further requirements for modeling will be required at this time.

OUTFALL AND SEWER LINE EVALUATIONS

Proposed permit condition S11. requires the Permittee to conduct an outfall inspection and submit a report detailing the findings of that inspection in the 4th year of the permit. The purpose of the inspection is to determine the condition of the discharge pipe and diffusers and to evaluate the extent of sediment accumulations in the vicinity of the outfall.

Proposed permit condition S11 requires the Permittee to inspect the underground sewer line carrying untreated process wastewater from the main pumping station to the aerated lagoon with visual/video prior to the expiration date.

TREATMENT SYSTEM OPERATING PLAN

In accordance with state and federal regulations, the Permittee is required to take all reasonable steps to properly operate and maintain the treatment system (40 CFR 122.41(e)) and WAC 173-220-150 (1)(g). A treatment system-operating plan was submitted as required by state regulation in the previous permit. It has been determined that the implementation of the procedures in the Treatment System Operating Plan is a reasonable measure to ensure compliance with the terms and limitations in the permit. Special condition S4 will require the permittee to update their Treatment System Operating Plan 180 cd after permit issuance date and after any major modification that changes the influent to the treatment system.

SLIMICIDE CERTIFICATION

The permittee has certified that they do not use pentachlorophenol or trichlorophenol in their slimicides.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control its production in order to maintain compliance with its permit. Condition G10 prohibits the reintroduction of removed substances back into the effluent. Condition G11 states that the Department will modify or revoke and reissue the permit to conform to more stringent toxic effluent standards or prohibitions. Condition G12 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G13 notifies the Permittee that additional monitoring requirements may be established by the Department. Condition G14 requires the payment of permit fees. Condition G15 describes the penalties for violating permit conditions.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this proposed permit be issued for five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-005.

1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington, D.C.

1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.

1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.

Tsivoglou, E.C., and J.R. Wallace.

1972. Characterization of Stream Reaeration Capacity. EPA-R3-72-012. (Cited in EPA 1985 op.cit.)

Washington State Department of Ecology.

1994. Permit Writer's Manual. Publication Number 92-109

Wright, R.M., and A.J. McDonnell.

1979. In-stream Deoxygenation Rate Prediction. Journal Environmental Engineering Division, ASCE. 105(E2). (Cited in EPA 1985 op.cit.)

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations that are described in the rest of this fact sheet.

The Department has published a Public Notice of Draft (PNOD) on May 26, 1999 in the Jefferson County Leader to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the office listed below. Written comments should be mailed to:

Department of Ecology
Industrial Section
300 Desmond Drive SW
PO Box 47600
Lacey, WA 98504-7600
Don Nelson

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6940, or by writing to the address listed above.

This permit and fact sheet were written by Don Nelson.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART-- An acronym for “all known, available, and reasonable methods of treatment”.

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation --The highest allowable average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

cd -- Calendar day

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

NSPS -- New source performance standards

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Responsible Corporate Officer-- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C--TECHNICAL CALCULATIONS

Several of the Excel® spreadsheet tools used to evaluate a discharger's ability to meet Washington State water quality standards can be found on the Department's homepage at <http://www.wa.gov/ecology>.

	Metal Criteria Translator as decimal	Metal Criteria Translator as decimal	Ambient Concentr ation (metals as dissolved)	Acute	Chronic	Acute Mixing Zone	Chronic Mixing Zone	LIMIT REQ'D?
Parameter	Acute	Chronic	ug/L	ug/L	ug/L	ug/L	ug/L	
copper	0.83	0.83	1.4100	4.8000	3.1000	1.79	1.73	NO
zinc	0.95	0.95	1.3600	90.0000	81.0000	1.98	1.88	NO
nickel	0.99	0.99	0.2920	74.0000	8.2000	1.34	1.16	NO
chromium	0.99	0.99	0.2990	1100.000 0	50.0000	0.97	0.85	NO

Effluent percentile value		Max effluent conc. measured (metals as total recoverable)	Coeff Variation		# of samples	Multiplie r	Acute Dil'n Factor	Chronic Dil'n Factor
	<i>Pn</i>	<i>ug/L</i>	<i>CV</i>	<i>s</i>	<i>n</i>			
0.95	0.050	5.00	0.60	0.55	1	6.20	64	77
0.95	0.050	7.00	0.60	0.55	1	6.20	64	77
0.95	0.050	11.00	0.60	0.55	1	6.20	64	77
0.95	0.050	7.00	0.60	0.55	1	6.20	64	77

APPENDIX D--PRODUCTION AND ALLOWANCE FOR BOD AND TSS

Production

	Kraft	OCC
Base	450	
Tier I (NSPS)	150	150
Tier II (NSPS)	0	100
Tier III (NSPS)	0	100
Tier IV (NSPS)	0	50
TOTAL	600	400
PRODUCTION		

Allowance

BPT

BOD	BOD	TSS	TSS
30 d	daily	30 d	daily
ave	max	ave	max
2.8	5.6	6	12

NSPS

2.7	5	4.8	9.1
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NSPS OCC

2.1	3.9	2.3	4.4
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ACEC

1.53 %

CCEC

1.28 %

APPENDIX E--RESPONSE TO COMMENTS

Port Townsend comments on the draft permit

Comment 1.

COVER SHEET: Facility mailing address is Port Townsend Paper Corporation P. O. Box 3170 Port Townsend, WA 98369. Facility location is 100 Paper Mill Hill Road, Port Townsend, WA

Response

Comment noted and the cover sheet has been changed.

Comment 2.

SUMMARY OF PERMIT REPORT SUMITTALS: Change S-9-A frequency to read “Monthly for one year”. Change S-10-A frequency to read “Quarterly for one year”.

Response

Thanks. The wordings have been changed. The author took the opportunity to revise the wording under these conditions to conform with Condition S9A and S10 A of the permit.

Comment 3.

S-1-A: 2nd paragraph, last sentence change “ (Outfall 005)” to “(Outfall 001)”.
Header for effluent limits should read Outfall 001.

Response

Corrected.

Comment 4

S-1-C: The appropriate title for outfall 003 “Salt Water Chest Overflow”.

Response

Corrected.

Comment 5.

S-1-D: Please rewrite this section to clarify that testing is required weekly rather than daily. This would be in agreement with the monitoring requirements on page10, and would reflect the requirements of the previous permit issued 10/14/93.

Response

The section has been changed. Also, the weekly limit for fecal coliform has been deleted since the test is performed monthly.

Comment 6.

S-2-A: 1st page, all references to “Outfall 005” should read “Outfall 001”.
001 temperature is measured continuously on a chart.

Response

Outfall 005 has been changed to 001 except for the sanitary sewer outfall.

Comment 6.

S-2-A Sanitary wastewater flow should be KGD instead of MGD

Response

The units have been changed. KGD is one thousand gallons per day.

Comment 7

S-2-B Change 1st paragraph to read:

“Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the discharge, and shall include representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance related conditions affecting effluent quality. The permittee shall recover valid data for all required monitoring periods during which effluent flows past the monitoring point, excluding periods of power outage, system breakdown, malfunction, repairs, calibration checks, laboratory error, and acts of God that interrupt the monitoring required by this permit. The monthly DMR shall include an explanation for any occasion during the month in which permittee was unable to recover valid sample data.”

Response

We recognize that there are instances where data is lost due to no fault of the permittee. However, for us to fulfill our duties, we must retain the decision making in cases where lost data occurs on a case by case basis. Therefore, we have left the condition as it was in the draft permit. We have done this in the air operating permits where continuous monitoring was involved, but not for periodic monitoring. The permit was not changed.

Comment 8

S-2-C Requirements for this section should be restricted to outfall 001 only. The 005 requirements are based on mg/l and the flow is unregulated. Therefore, flow calibration for 005 is not relevant.

Response

You are right that the limits for BOD and TSS are based on concentration. However, the flow measurement is an independent requirement. In order to operate a wastewater treatment system one has to obtain operational parameters. To get the operational parameters one has to have an accurate flow. We consider the proper operation and maintenance of the flow meter necessary to properly operate the sanitary wastewater treatment system. Therefore, the permit language was not changed.

Comment 9

S-3-A Was it your intention to change the reporting method and schedule? Due to testing and clerical needs, this reporting date would be onerous. Please change 1st paragraph to read "Monitoring data obtained during the previous month shall be summarized and reported on EPA form 33204 and ***be submitted by*** the 15th day of the month.

Response

The reporting period starts on the effective date of the permit. The effective date of the permit has been set at August 1, 1999. The first report must be submitted by the fifteenth of the following month and thereafter, on the fifteenth of each month following the monitoring period. An electronic version of the reporting form has been sent via email. The wording "must be submitted" was substituted for received.

Comment 10

S-3-E Please change this section to read as follows:

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department of Ecology (Department) with the following information:

- a. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharge;
- b. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- c. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify the Department by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under 40 CFR section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or environment, 40 CFR Part 122 requires that the information specified in items G4.a., G4.b., and G4.c., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the

circumstance. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

Response

The following words typed in italics are verbatim from WAC 173-216-110(6). The last part of condition 1 is to confirm that the violation has stopped and to relay the information to Ecology. The last sentences are related to being at AKART. The permit was not modified.

E. NONCOMPLIANCE NOTIFICATION

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. *Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, correct the problem and, if applicable, repeat sampling and analysis of any violation immediately and submit the results to the Department within 30 days after becoming aware of the violation;*
2. *Immediately notify the Department of the failure to comply; and*
3. *Submit a detailed written report to the Department within thirty days (5 days for upsets and bypasses), unless requested earlier by the Department. The report should describe the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.*

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

Comment 11

S-9-E Change 2nd sentence to read “The two species used in the initial Acute Effluent Characterization”. Using "All" may lead to confusion that all three species listed must be tested.

Response

There are only two test species used in the characterization study, I don't see any confusion. The condition remains the same.

Comment 12

S-10-E Change 2nd sentence to read “The three species used in the initial Chronic Effluent Characterization”. Using "All" may lead to confusion that all five species listed must be tested.

Response

There are only three test species used in the characterization study, I don't see any confusion. The condition remains the same.

Comment 13

S-11 Outfall should be 001 instead of 005. This section is beyond the scope of what was agreed to in the Heffner letter of 1/20/99. Section should be rewritten to read “wastewater line from pumping station to the primary clarifier”.

Response

The outfall number for the diffuser portion of the condition has been changed. The inspection of the diffuser is considered good preventative maintenance to prevent spills. The inspection was not part of Mark Heffner's letter. It is placed in the permit to verify that the diffuser has not been damaged. Mark Heffner's letter does not specify that the inspection was to end at the primary clarifier. The letter only refers to the underground portion. Conversations with Mark indicated that the initial problem was between the primary clarifier and the pump station. The condition has been rewritten to define the inspection as being from the pump station to the primary clarifier.

Comment 14

- G-1 Please define what is meant by “information”. To require a certification on all “information” sent to the department is both onerous and unnecessary. We presently certify the application and DMR. Other information is usually sent signed by environmental personnel but not certified by the company officer.

Response

Information is all submittals in all formats: verbal, written, or electronic. Your company officer can delegate to the environmental what type of documents can be transmitted by him in the day to day business. The reason for this condition is that no submitted information to the permitting authority by the permittee can be false or misleading. The condition was not modified.

Comment 15

- G-3-D The term “a material change in the condition of the waters of the state” is rather broad. This section should state the receiving waters that could be effected by the permittee only.

Response

This condition comes directly out of RCW 90.48.195. The original language has been kept in the permit.

Comment 16

- G-4 Please clarify if this is required when we hard-pipe condensate to the pond under the Cluster rules.

Response

Yes, a review is required before the hard piping is installed. A Notice of Construction may be required under WAC 173-400-110 before the start of construction.

Comment 17

- G-5 Submission of a plan 180 days in advance seems excessive, could this be changed to 90 days? If this change is not possible a clause allowing a shorter period for unforeseen construction or modification should be included in this section.

Response

The time requirement has been changed to 90 days.

Comment 18

G-7 We would like to see language included that makes reference to the concept that Ecology may extend the permit if the application is timely.

Response

This language is in state and federal regulation. WAC 173-220-180(5) states that: "When the permittee has made a timely and sufficient application for renewal of a permit, an expiring permit remains in effect and enforceable until the application has been denied or a replacement permit has been issued by the department." CFR 40 Part 122.5(d) continuation of the permit is allow if state law allows the permit continues in force. Ecology has delayed reissuing permits because of delays in promulgation of the new effluent guidelines. Ecology will be more punctual in the future.

Comment 19 and Response

FACT SHEET

Page 2 Last paragraph, 1st sentence should read "001" instead of "005".

Noted, the factsheet was in error. The outfall number should have been 001.

Page 3 Last word of 3rd and 5th sentence should read "001" instead of "005".

Noted, the factsheet was in error. The outfall number should have been 001.

Please omit "and 003" from the end of the 8th sentence.

Noted, temperature is not a concern for outfall 003 since it discharge unused sea water.

Last sentence reads " The mill had the following discharge from outfall 005 during the last two years". This should read "combined discharge from outfall 001" or leave out the discharge number and word headers to read "PROCESS WASTEWATER 001" and "SANITARY WASTEWATER 005".
Fecal Coliform parameters not on page.

Noted.

Page 4 2nd and last word of the 1st sentence should read "001" instead of "005".

Noted, the factsheet was in error. The outfall number should have been 001.

Page 5 Last section: unbleached Kraft is 430 Subpart C and OCC is 430 subpart J. Please change these to reflect current regulations. Current Subpart E contains requirements that we are not subject to. Please make these changes on pages 5,6 and 7.

Noted, the new effluent guidelines do not affect the effective date of the effluent guidelines for unbleached kraft. The factsheet tried to explain that the effluent limitations were derived from the 1982 effluent guidelines' subcategories for the unbleached kraft. Subpart E mentioned in the factsheet was the 1982 version.

Page 6 Last paragraph -- Remove reference to Semi-Chemical pulp.

The semi-chemical pulp mill where the cooking chemicals are reclaimed with a Kraft recovery furnace will be in subpart C in the new effluent guideline scheme of grouping when this subpart is promulgated. The semi-chemical pulp was put into the factsheet to include all of the processes to be contained in subpart C.

Page 7 Please state that Subpart C became 40 CFR 430.105 Subpart J.

I assume that you meant Subpart E. Subpart E became Subpart J in the new guidelines.

Page 9 Antidegradation – 1st paragraph, next to last sentence, change sentence to read, “Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall be protected”.

Noted, this would conform to state regulations.

Page 10 Fecal Coliforms – Change to read “14 organisms/100 ml and shall not have”, instead of “or have”.

Noted, this would conform to state regulations.

Page 11 Change Turbidity description to read “Shall not exceed 5 NTU over background”.

Noted, this would conform to state regulations.